

**Listing of Claims:**

1. (Currently amended) A method of using a laser output to rapidly remove a portion of target material from a target material location of a workpiece, the laser output removing ~~[[a]]~~ the portion of the target material at a material removal rate, and the target material characterized by a temperature and a dimensional stability property, comprising:  
applying heating energy in the form of a light beam to the target material location to elevate ~~[[its]]~~ the temperature of the target material while substantially maintaining ~~[[the]]~~ its dimensional stability property of the target material; and  
directing for incidence on a portion of the target material at the target material location a processing laser output characterized by laser beam parameters that are appropriate to effect removal of the portion of the target material, the combined incidence of the processing laser output and the application of heating energy on the target material location enabling the processing laser output to remove ~~[[a]]~~ the portion of the target material at a material removal rate that is higher than a material removal rate achievable by the processing laser output in the absence of the heating energy while maintaining at the target material location the dimensional stability property of the target material, other than the portion undergoing removal.